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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,986	11/12/2003	Bruce W. Cobb	1934-10-3	7332

7590 09/02/2004

Bryan A. Santarelli  
GRAYBEAL JACKSON HALEY LLP  
Suite 350  
155-108th Avenue NE  
Bellevue, WA 98004-5901

EXAMINER

AVILA, STEPHEN P

ART UNIT	PAPER NUMBER
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3617

DATE MAILED: 09/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/712,986	Applicant(s) COBB ET AL.	
	Examiner Stephen Avila	Art Unit 3617	<i>NW</i>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3-13, 17, 18, 21-24, and 26 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Schmidt. Schmidt discloses a ship with a hull structure with various hull portions arrangements (note Figures 11-16, for example, some having different lengths, some with the same lengths, some with attached struts, some with individual struts), the hulls having a Froude number of greater than approximately 0.8 (note column 2, line 49, for example). Note that the hull portions of Schmidt are arranged in a quadrilateral pattern. It would have been an obvious choice of engineering design to a person of ordinary skill in the art at the time the invention was made would have been to form the hull portions with an octangular pattern for improved buoyancy. With respect to the intended use on a large waterplane ship, the intended use has been given limited weight, and it is noted that the hull portions of Schmidt are capable of being used with on a large waterplane ship.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt in view of Loui. Schmidt does not disclose a triangular pattern. Loui teaches a triangular pattern. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to form the pattern of Schmidt to be triangular for improved speed.

5. Claims 14-16, 19, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt in view of Barbier et al. Schmidt does not disclose ballasting. Barbier et al teach ballasting hull portions (note ballast tanks 34). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to form the hull portions of Schmidt with ballast tanks as taught by Barbier et al to adjust the waterplane.

6. Claims 7 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 depends from itself. It appears claim 7 should depend from claim 6. Additionally, in claim 7, line 2, it appears "isles" should be changed to "is less".

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Orneblad shows a hull.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Avila whose telephone number is 703-308-2578. The examiner can normally be reached on Monday to Thursday from 8 AM to 4 PM (EST).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samuel J. Morano can be reached on 703-308-0230. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stephen Avila  
Primary Examiner  
Art Unit 3617

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AS  
8/31/04